

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for measuring thickness of an optical disc by using an interference effect of ~~the~~ an optical disc layer, comprising the steps of:

detecting an intensity of a reflective light according to a wavelength of a light as spectrum data for each wavelength;

converting the detected spectrum data for each wavelength into a spectrum value as a function of a wavelength ~~that~~ and a refractive index ~~is reflected~~; and

detecting a position where the intensity of the reflective light has a peak as a thickness of a spacer layer and a cover layer respectively by converting the converted value into a length of an interference area for representing a layer thickness of the optical disc by the Fast Fourier Transform.

2. (Currently Amended) The method of claim 1, wherein in said converting step, the spectrum value as a function of a wavelength ~~that~~ has a refractive index ~~is reflected~~ is of $n(\lambda)/2\lambda$.

3. (Previously Presented) The method of claim 1, wherein the optical disc layer comprises the spacer layer with a refractive index n_1 and the cover layer with a refractive index n_2 different from the refractive index n_1 .

4. (Previously Presented) The method of claim 3, wherein respective positions d_1 and d_2 where the intensity of the light obtained by reflecting the refractive index into a function of a wavelength become a peak value are obtained as the thickness.

5. (Currently Amended) The method of claim 1, wherein in said converting step, an equation for processing the spectrum that the refractive index is reflected into the function of wavelength is expressed as following:

$$2n(\lambda)d = m\lambda$$

$$2n(\lambda + \Delta\lambda)d = (m - 1)(\lambda + \Delta\lambda)$$

wherein, d is a thickness, n is a refractive index of the optical disc layer, λ is wavelength, and m is integer value.

6. (Cancelled)